

Abstract

5 A fuel injector (1) for fuel injection systems of internal combustion engines, in particular for directly injecting fuel into the combustion chamber of an internal combustion engine, has a solenoid coil (8), an armature (11) that can be acted upon by the solenoid coil (8) in a stroke direction in opposition to a first resetting spring (27), and a valve needle (13) connected to a valve-closure member (14). The valve needle (13) has a first limit stop (32) for the movable armature (11), the armature (11) additionally being acted upon by a second resetting spring (40). In addition, a stationary second limit stop (33) is provided for the armature (11). The second resetting spring (40) acts upon the armature (11) contrary to the stroke direction and, in the resting position, when the solenoid coil (8) is not excited, the second resetting spring holds the armature (11) in position at the second limit stop (33) such that the armature (11) is at a preestablished distance from the first limit stop (32), which is configured on the valve needle (13). A connecting part (16) can be made of a magnetic material and can be configured as having a magnetic restricter (56), or it can be made of a nonmagnetic material.

(Figure 4)